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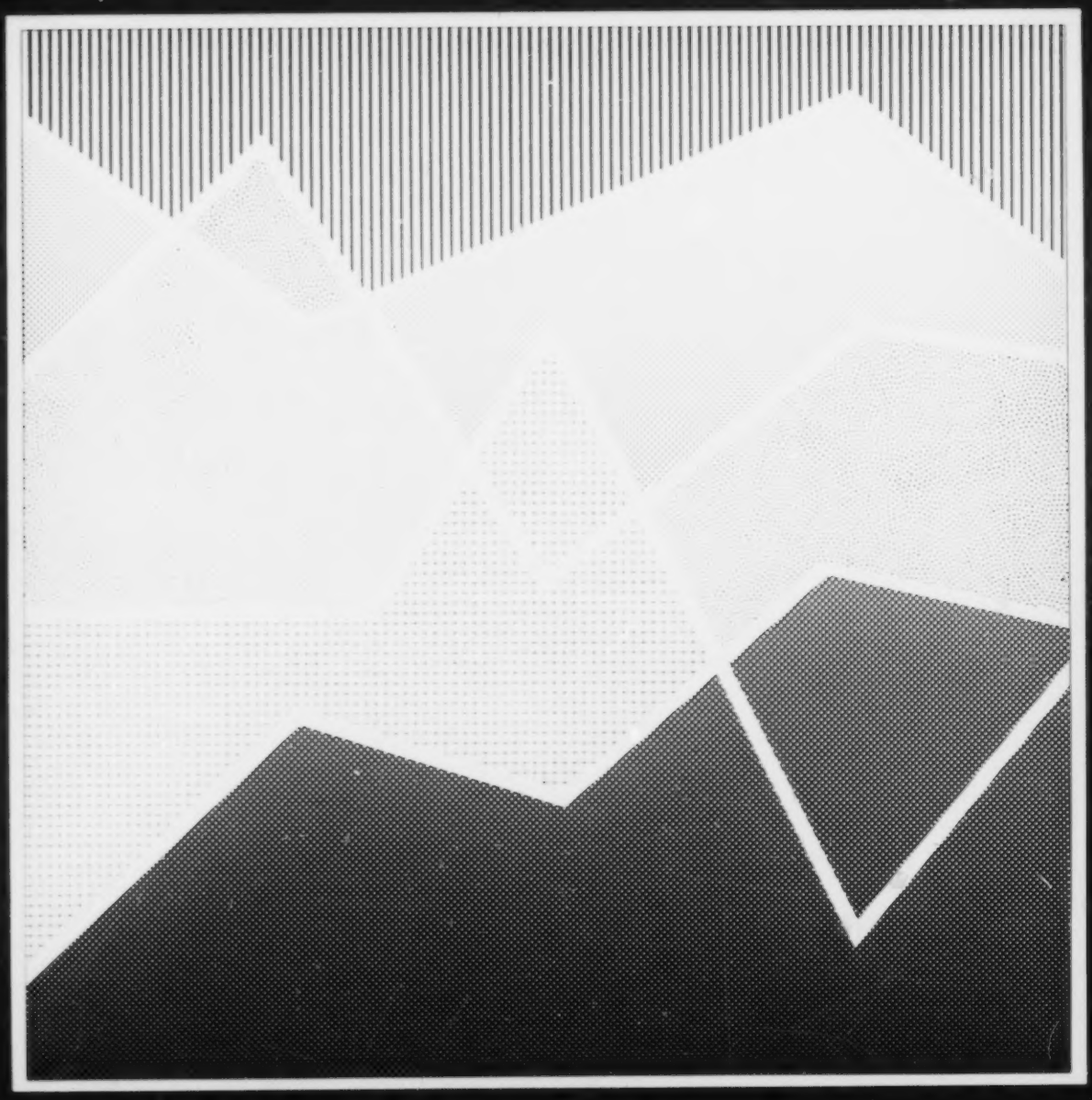
American Meat Institute

ANNUAL FINANCIAL REVIEW

OF THE MEAT PACKING INDUSTRY, 1982



September 1983

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Financial Review of the Meat Packing Industry, 1982

Summary

Total Sales of the United States meat packing industry in 1982 were estimated at $49.50 billion, up 2% from the revised 1981 sales figure. Decreased meat supplies resulting from a reduction in hog numbers were more than offset by increased prices of meat produced.

Net Income after taxes was estimated at $404 million, up 18% from the revised 1981 figure. Industry costs for livestock and raw materials increased 2%, but operating expenses rose less than 1%, the smallest increase in a decade. Labor costs, the largest component of operating expenses, showed a slight decline in 1982.

The ratio of *Net Income-to-Sales* averaged 0.8 in 1982, up from the depressed year-earlier ratio, but below the long-run industry average. The *Sales-to-Assets* ratio, an indicator of the industry's sales turnover rate, was 6.5 in 1982. This figure is well above the sales turnover rate for other manufacturers and underscores the importance of livestock volume to industry profitability. *Earnings-to-Assets* averaged 5.3 in 1982, up from a year earlier. *Earnings-to-Net Worth* increased to 10.4 for meat packers, a better rate of return than in many other manufacturing industries in the recession-plagued economy of 1982.

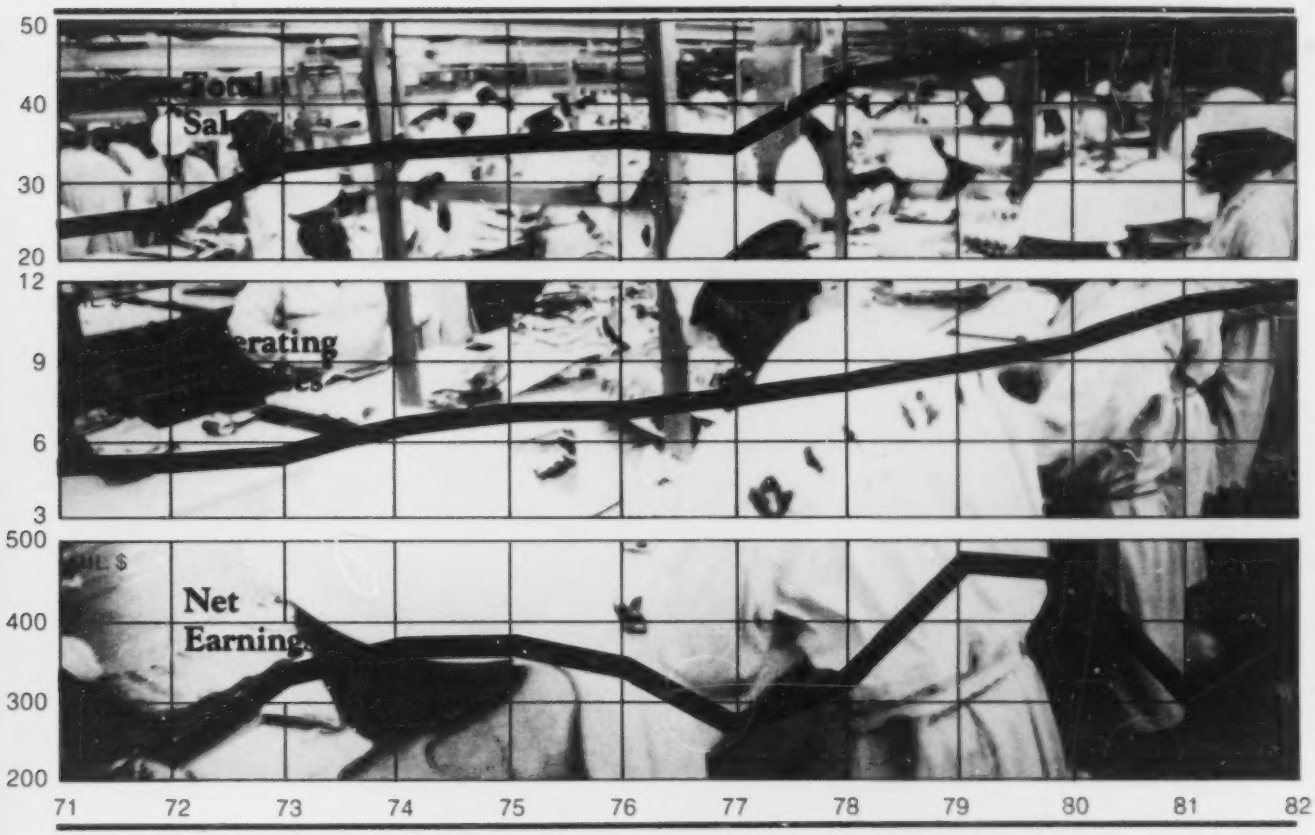
The data in this report are based on a survey of meat packing and processing companies across the nation. The American Meat Institute has conducted a survey of the industry each year since 1947. Prior to that, the U.S. Department of Agriculture issued annual reports based on meat packers' financial statements filed each year with the government. This year's report is the 58th annual report on the industry and is based on confidential information voluntarily provided by 164 companies. Various government and trade reports provided additional sources of information.

Throughout this report companies that slaughter livestock are defined as MEAT PACKERS, regardless of whether or not they also process meat and meat products. Companies that do not slaughter livestock, but specialize in the manufacture of processed meats, including canned meat and sausage, are defined as MEAT PROCESSORS.

Due to data limitations it is difficult to derive estimates for the meat processing industry. Some idea of processors' importance may be seen in 1977 census data, which show the value of shipments by the meat processing industry equaled 27% of the value shipped by the meat packing industry. This suggests a 1982 sales figure for meat processors of approximately $13.4 billion. Thus, meat packing and processing is a $62.9 billion dollar industry.

Meat Packers' Sales Dollar, 1982

Part I—Financial Status of the Meat Packing Industry in 1982



1982 Sales Up—Earnings Improve

Total sales of the meat packing industry in 1982 were estimated at $49.50 billion, up 2% from revised 1981 sales. The tonnage of product produced by the red meat industry declined 4% in 1982, to 37.3 billion pounds, but this reduced output was more than offset by increased prices of meat produced. Wholesale meat prices increased nearly 5% in 1982.

Even though sales of meat and meat products increased in 1982, the sales growth was inhibited by overall flat economic conditions in the United States and by stagnant consumer demand. Sales of the meat packing industry have risen relatively slowly for the past three years, compared with the 9% rate of sales increase in 1979 and 17% sales increase in 1978. The 1982 U.S. inflation rate, as measured by the government's Consumer Price Index, was slightly above 6%, a figure greater than the sales increase recorded by the meat packing industry. Thus, in real terms, sales of meat packers lost ground in 1982.

Industry costs for livestock and other raw materials were estimated at $38.95 billion, up 2% from the revised year-earlier figure. This increase was due solely to higher hog costs during the year. Packer costs for cattle, calves, sheep and lambs actually declined in 1982 for the third year in a row, as supplies of these species increased. However, hog prices jumped by 25%, due to sharply reduced supplies, reaching record levels during 1982. Consequently, packer costs for procuring hogs rose an estimated 12% during the year.

Operating expenses accounted for 19.9% of the industry's sales dollar in 1982, down from the revised 20.1% figure in 1981. Total operating expenses in 1982 were estimated at $9.83 billion, up less than 1% from 1981 and the smallest annual increase of the last decade. Labor costs, the single largest component of operating expenses, declined somewhat in 1982. De-

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spite a slight increase in wage and salary costs, industry expenses for employee benefits were down, resulting in a decline in overall labor costs for the first time in many years. The number of people employed in the meat packing industry declined 5% in 1982, contributing to labor cost moderation.

Interest costs also were down during the year, as interest rates declined from high year-earlier levels. Depreciation, packaging supplies, and other expenses showed moderate increases, compared with recent years.

Income before taxes was estimated at $723 million, up 15% from the depressed year-earlier figure. Net income after taxes was calculated as $404 million for the meat packing industry, up 18% from the revised 1981 figure. The economic environment in which packers operated in 1982 improved somewhat from 1981, but the problems of low hog supplies, unemployment, and general economic uncertainty continued to hamper the industry's bottom-line performance during the year.

A breakdown of sales, earnings and expenses for the meat packing industry since 1971 is shown in Table 1-2. Figures for 1981 and 1980 have been revised from last year's report to reflect a change in the mix of packers responding to this year's survey, and to ensure consistency with aggregate price, production, and slaughter data published by the government. The various components of the meat packing sales dollar, expressed in percentage terms, have remained relatively constant over the years. In absolute dollar terms, however, most of the components of the meat packing sales dollar have increased over time, particularly during the inflationary period of the late 1970's. Moderating costs in 1982, especially for labor, clearly contributed to improved earnings figures for meat packers.

Earnings Ratios Healthier

Improved income levels in 1982 resulted in healthier earnings ratios in the meat packing industry, although some ratios remain below historical norms. This year, for the first time, two different sets of earnings ratios are presented: ratios before taxes and ratios after taxes. Ratios of income after taxes sometimes are not comparable across companies, due to differences in income tax caused by varying corporate structure. For example, the income tax burden on a meat packing subsidiary of a conglomerate corporation can differ from the tax burden on a non-diversifed meat packing company. For this reason, the ratio of income before taxes sometimes provides a better standard of comparison.

Before taxes, the meat packing industry earned $1.46 per $100 of sales in 1982, or 1.46%. Return on net worth was equivalent to 18.54% before taxes.

Net income after taxes improved from the depressed 1981 figure, rising to 0.82% of sales. This figure is below the historical industry average of about 1.00% return on sales. The low earnings-to-sales ratio of meat packing compared with other industries reflects the high-volume nature of meat packing and underscores the importance of livestock volume to profitability. Reduced supplies of hogs in 1982 adversely affected pork packers' margins and constrained overall industry earnings.

Nevertheless, after-tax return on net worth increased to 10.36% in 1982. This figure is notable in that it exceeds the average return on net worth shown by other manufacturing industries in 1982. Table A-1 on page 23 compares financial ratios of the meat packing industry with those of other manufacturing industries. Total manufacturing showed a earnings-to-net worth percentage of 9.08%. The durable goods sector recorded a 6.08% rate of return on net worth, with losses in the iron and steel and nonferrous metals industries, and exceptionally disappointing performance in the motor vehicle, transportation equipment, and other durable goods industries.

The 1982 recession once again proved the resiliency of the meat packing industry and of food manufacturing in general. The industry provided investors with an acceptable rate of return on investment when compared with industries more sensitive to recession.

TABLE 1-1

Financial Ratios of the Meat Packing Industry, 1980-82

Item	1980	1981	1982
Income Before Taxes Per:			
$100 Sales	$ 1.72	$ 1.30	$ 1.46
$100 Assets	10.64	8.32	9.45
$100 Net Worth	20.81	17.03	18.54
100 Lbs. Live Wt.	1.35	1.03	1.22
100 Lbs. Dressed Wt.	2.13	1.63	1.94
Income After Taxes Per:			
$100 Sales	1.00	.71	.82
$100 Assets	6.21	4.53	5.28
$100 Net Worth	12.15	9.27	10.36
100 Lbs. Live Wt.	.79	.56	.68
100 Lbs. Dressed Wt.	1.24	.89	1.08
Sales Per $ of Assets	6.20	6.41	6.47

TABLE 1-2

Sales, Raw Materials Costs, Expenses and Income of the Meat Packing Industry, 1971-1982

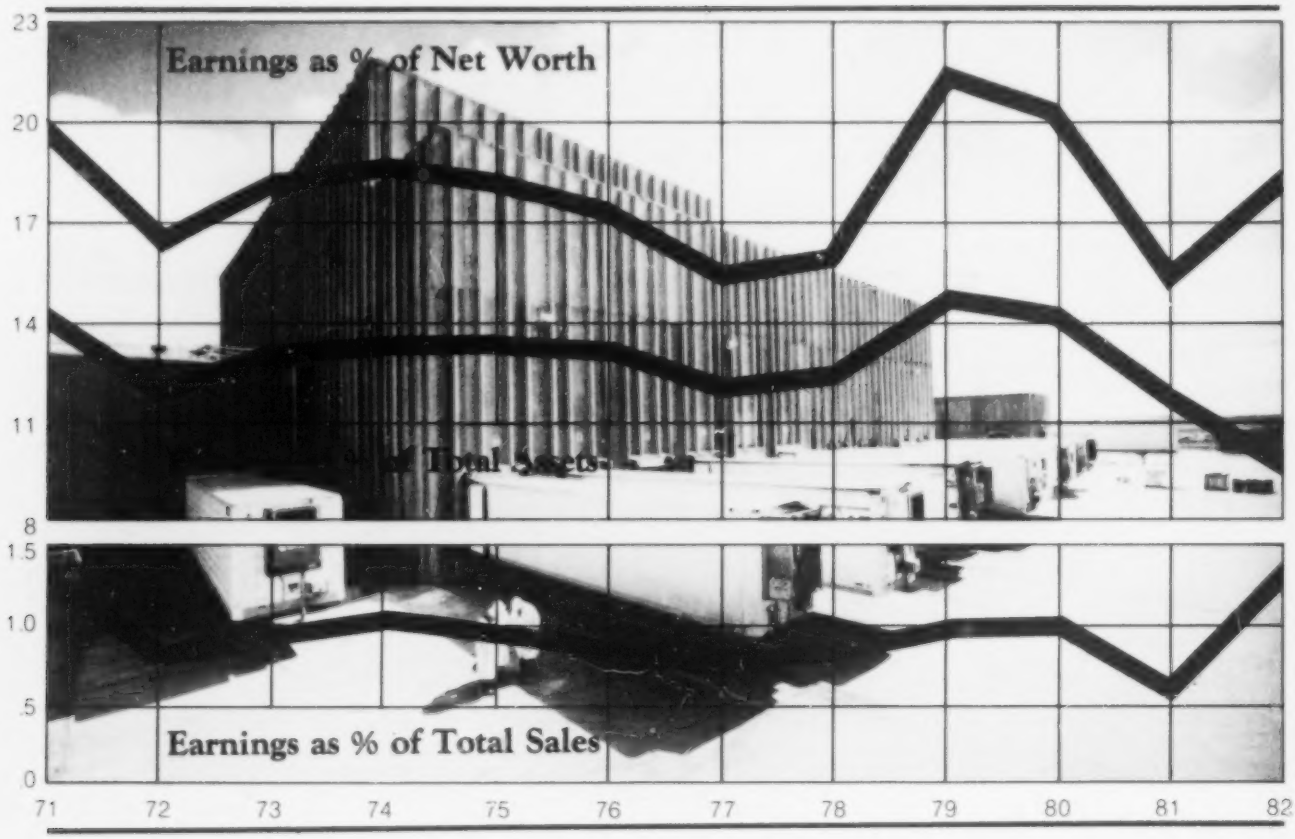
ITEM	1971	1972	1973	1974	1975	1976
	MILLION DOLLARS					
Total Sales	$24,725	$27,800	$33,225	$35,500	$36,650	$37,450
Cost of Livestock and Other Raw Materials	18,775	22,025	26,935	28,260	28,950	29,475
Gross Margin	5,950	5,775	6,290	7,240	7,700	7,975
Operating Expenses						
Wages and Salaries	2,360	2,345	2,540	2,725	2,830	2,915
Employee Benefits						
Retirement Expense	105	97	111	130	146	161
Social Security Taxes	107	117	151	172	179	192
Insurance & Hospitalization	105	111	136	155	178	196
Vacation, Holiday & Sick Leave	147	156	168	184	201	213
All Other Benefits	33	36	40	43	45	47
Total Benefits	497	517	606	684	749	809
Interest	75	82	105	141	138	109
Depreciation	191	200	200	214	243	245
Rents	75	90	86	95	103	108
Taxes*	61	61	65	74	78	85
Supplies & Containers	785	795	845	995	1,165	1,210
All Other Expenses	1,295	1,265	1,240	1,645	1,720	1,860
Total Operating Expenses	5,339	5,355	5,687	6,573	7,026	7,341
Income Before Taxes	611	420	603	667	674	634
Income Taxes	277	185	263	292	294	285
Net Income	334	235	340	375	380	349
	PERCENT OF TOTAL SALES					
Total Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Livestock and Other Raw Materials	75.9	79.2	81.1	79.6	79.0	78.7
Gross Margin	24.1	20.8	18.9	20.4	21.0	21.3
Operating Expenses						
Wages and Salaries	9.5	8.4	7.6	7.7	7.7	7.8
Employee Benefits						
Retirement Expense	.4	.4	.3	.4	.4	.4
Social Security Taxes	.4	.4	.5	.5	.5	.5
Insurance & Hospitalization	.4	.4	.4	.4	.5	.5
Vacation, Holiday & Sick Leave	.6	.6	.5	.5	.5	.6
All Other Benefits	.1	.1	.1	.1	.1	.1
Total Benefits	1.9	1.9	1.8	1.9	2.0	2.1
Interest	.3	.3	.3	.4	.4	.3
Depreciation	.8	.7	.6	.6	.7	.7
Rents	.3	.3	.3	.3	.3	.3
Taxes*	.3	.2	.2	.2	.2	.2
Supplies & Containers	3.2	2.9	2.6	2.8	3.2	3.2
All Other Expenses	5.3	4.6	3.7	4.6	4.7	5.0
Total Operating Expenses	21.6	19.3	17.1	18.5	19.2	19.6
Income Before Taxes	2.5	1.5	1.8	1.9	1.8	1.7
Income Taxes	1.1	.7	.8	.8	.8	.8
Net Income	1.4	.8	1.0	1.1	1.0	.9

TABLE 1-2

Sales, Raw Materials Costs, Expenses and Income of the Meat Packing Industry, 1971-1982 (Cont'd.)

ITEM	MILLION DOLLARS					
	1977	1978	1979	1980	1981	1982
Total Sales	$37,275	$43,625	$47,650	$47,925	$48,525	$49,500
Cost of Livestock and Other Raw Materials	28,925	34,425	37,850	37,575	38,125	38,950
Gross Margin	8,350	9,200	9,800	10,350	10,400	10,550
Operating Expenses						
Wages and Salaries	3,125	3,465	3,511	3,761	3,795	3,806
Employee Benefits						
Retirement Expense	190	207	227	234	216	164
Social Security Taxes	208	242	253	282	287	293
Insurance & Hospitalization	234	264	268	317	370	393
Vacation, Holiday & Sick Leave	230	252	252	268	285	281
All Other Benefits	56	54	48	52	52	54
Total Benefits	918	1,019	1,048	1,153	1,210	1,185
Interest	112	139	161	161	168	162
Depreciation	268	307	298	306	316	328
Rents	113	129	106	109	122	131
Taxes*	84	93	77	77	66	62
Supplies & Containers	1,200	1,290	1,444	1,574	1,539	1,563
All Other Expenses	2,030	2,190	2,313	2,387	2,554	2,590
Total Operating Expenses	7,850	8,612	8,958	9,528	9,770	9,827
Income Before Taxes	500	568	842	822	630	723
Income Taxes	225	235	354	342	287	319
Net Income	275	333	488	480	343	404
	PERCENT OF TOTAL SALES					
Total Sales	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Livestock and Other Raw Materials	77.6	78.9	79.4	78.4	78.6	78.7
Gross Margin	22.4	21.1	20.6	21.6	21.4	21.3
Operating Expenses						
Wages and Salaries	8.4	7.9	7.4	7.8	7.8	7.7
Employee Benefits						
Retirement Expense	.5	.5	.5	.5	.4	.3
Social Security Taxes	.6	.6	.5	.6	.6	.6
Insurance & Hospitalization	.6	.6	.6	.7	.8	.8
Vacation, Holiday & Sick Leave	.6	.6	.5	.6	.6	.6
All Other Benefits	.2	.1	.1	.1	.1	.1
Total Benefits	2.5	2.4	2.2	2.5	2.5	2.4
Interest	.3	.3	.3	.3	.3	.3
Depreciation	.7	.7	.6	.6	.6	.7
Rents	.3	.3	.2	.2	.3	.3
Taxes*	.2	.2	.2	.2	.1	.1
Supplies & Containers	3.2	3.0	3.0	3.3	3.2	3.2
All Other Expenses	5.5	5.0	4.9	5.0	5.3	5.2
Total Operating Expenses	21.1	19.8	18.8	19.9	20.1	19.9
Income Before Taxes	1.3	1.3	1.8	1.7	1.3	1.4
Income Taxes	.6	.5	.8	.7	.6	.6
Net Income	.7	.8	1.0	1.0	.7	.8

*Other than Social Security and Income Taxes



Measured by sales-to-assets ratio, the sales turnover rate for meat packers improved in 1982 to 6.43. This ratio is typically much greater than for other manufacturers, and is another indication of the importance of livestock volume to industry viability.

Industry financial data from 1925 to the present are summarized in Table A-3 at the end of this report.

Meat Production

Red meat production declined in 1982 for the first time in three years, due solely to a sharp drop in pork supplies. Production of beef, veal, lamb and mutton increased.

Comercial production of red meat totaled 37.3 billion pounds in 1982, down 4% from the 38.7 billion pounds produced in 1981.

Beef production in commercial establishments totaled 22.4 billion pounds, up 1% from 1981—the third consecutive annual increase in production.

Pork production totaled 14.1 billion pounds, down 10% from the previous year—the second consecutive annual decline from the record level of production achieved in 1980.

Although veal, and lamb and mutton production increased from 1981, in aggregate these products account for only a small share of the total meat produced in the United States.

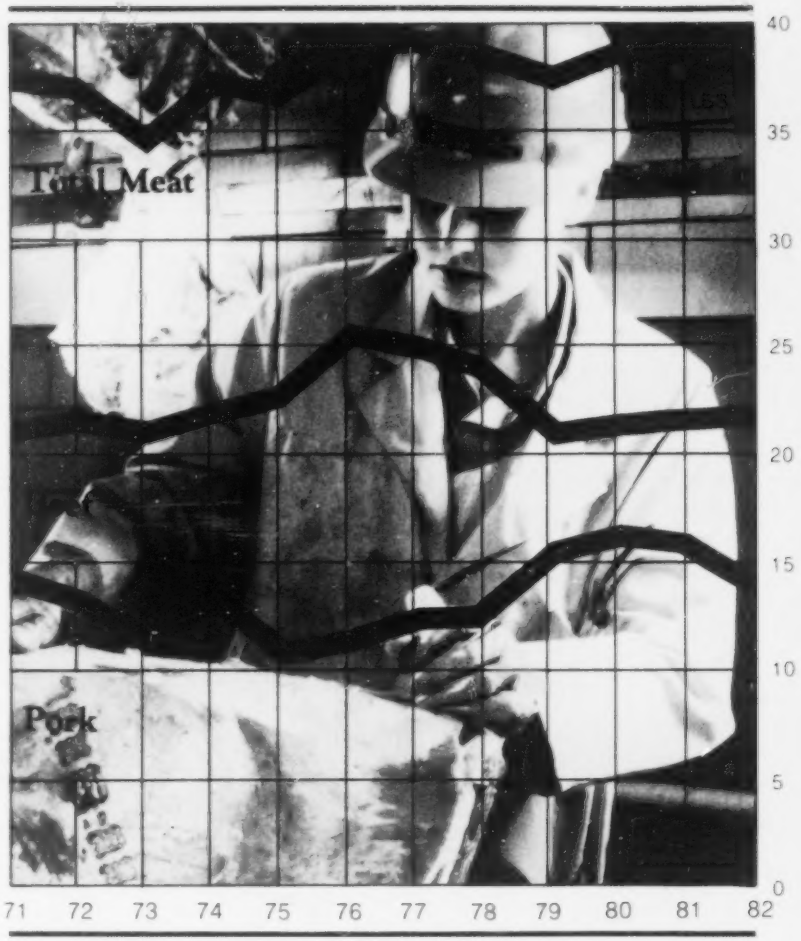


TABLE 1-3

Commercial Meat Production*, 1981-82

Item	1981	1982	% Change
	Billion Pounds		
Beef	22.2	22.4	+1%
Veal	.4	.4	+2
Pork	15.7	14.1	−10
Lamb & Mutton	.3	.4	+9
Total	**38.7**	**37.3**	**−4**

Source: U.S. Department of Agriculture

**Based on packers dressed weight. Pork excludes lard and rendered pork fat. Totals may not add due to rounding.*

Livestock Costs Rise Due to Higher Hog Prices

Livestock and raw material costs increased for the meat packing industry due to higher hog costs. The cost to packers of procuring cattle, calves and sheep and lambs actually declined in 1982 for the third year in a row, due to increased supplies of these species. In contrast, hog prices rose sharply, reaching record levels and more than offsetting the lower procurement costs for other livestock species. Overall industry costs for livestock and raw materials were estimated at $38.95 billion in 1982, up 2% from a year earlier.

Cattle slaughter in 1982 increased for the third year in a row to 35.8 million head. This represents a 3% increase from 1981 and was accompanied by a 2% decline in prices. Calf slaughter increased 8%, while calf prices declined 7%. Hog slaughter declined for the second year in a row to 82.2 million head, a 10% decline. In 1980 a record 96.1 million head were slaugh-

tered in commercial packing plants. The decline in hog supplies caused a sharp increase in hog prices, to an average $55.07 per cwt, up 25% from the 1981 average of $44.12 per cwt. Hog prices in August 1982 averaged a record $63.10 per cwt, and contributed to tight operating margins for pork packers.

Commercial sheep and lamb slaughter increased 7% in 1982 and lamb prices for the year were down 3%.

TABLE 1-4

Livestock Prices, 1981-82

Item	1981	1982	% Change
	Dollars per Cwt		
Cattle*	$58.35	$57.34	−2%
Calves	64.00	59.80	−7
Lambs	54.90	53.10	−3
Hogs	44.12	55.07	+25

Source: U.S. Department of Agriculture
**Weighted average of steers, heifers, and cows at Omaha*

Reduced overall meat supplies in 1982 resulted in higher meat prices. At the retail level meat prices increased, on average, 5%. Beef and veal prices were up only 1%, while pork prices jumped 13%. Wholesale meat prices also increased 5%, led by a 15% jump in pork prices. Beef prices at wholesale actually were down 1%, reflecting lower cattle prices. Indices of meat prices at wholesale and retail are shown in Table 1-5.

TABLE 1-5

Meat Price Indices, 1981-82

Item	1981	1982	%Change
	(1967=100)		
Wholesale Meat Prices	239.0	250.6	+5%
Beef and Veal	246.8	245.0	−1
Pork	218.1	251.1	+15
Other Meats	250.6	266.1	+6
Retail Meat Prices	257.8	270.3	+5
Beef and Veal	272.6	276.5	+1
Pork	228.6	258.1	+13
Other Meats	259.2	267.0	+3

Source: U.S. Department of Labor

TABLE 1-6

Year-End Assets, Liabilities, and Net Worth of the Meat Packing Industry, 1981-82

Item	1981	1982	% Change
	Million Dollars		
Current Assets	$4,300	$4,225	−2%
Inventories	1,610	1,560	−3
Receivables	1,980	1,965	−1
Other	710	700	−1
Other Assets	3,275	3,425	+5
Total Assets	**7,575**	**7,650**	+1
Current Liabilities	2,300	2,250	−2
Other Liabilities	1,575	1,500	−5
Total Liabilities	**3,875**	**3,750**	−3
Net Worth	**3,700**	**3,900**	+5
Working Capital*	2,000	1,975	−1
Percent Net Worth to Total Assets	48.8%	51.0%	
Ratio of Current Assets to Current Liabilities	1.87	1.88	

**Difference between current assets and current liabilities.*

Industry Net Worth Increases

The meat packing industry's year-end net worth was estimated at $3,900 million in 1982, up $200 million, or 5%, from 1981. Total industry assets rose $74 million to $7,650 million, while industry liabilities fell $125 to $3,750 million. Net worth as a percentage of total assets rose from 48.8% in 1981 to 51.0% in 1982.

The industry's working capital position declined for the fifth consecutive year in 1982, as current assets fell more than current liabilities. The ratio of current assets to current liabilities increased to 1.88 in 1982, reversing a five-year downward slide.

All components of the industry's year-end current assets declined in 1982, with inventories showing the largest decline. Year-end inventories fell $50 million to $1,560 million and receivables fell $15 million to $1,965 million.

Employees Numbers Reduced—Moderating Wages

The number of people employed in the meat packing industry declined significantly in 1982. The overall trend in meat packing employment has been down for the past two decades, but 1982 job losses were magnified by reduced levels of pork production, and by widespread unemployment in the overall economy. Relatively high wages in meat packing, compared with other manufacturing industries, have provided a strong incentive for adoption of labor-saving technology, and in the uncertain economic environment of 1982 prompted packers to seek wage concessions. Wages, salaries, and employee benefits account for the largest single component of meat packers' operating expenses, 51% in 1982.

The number of people employed in meat packing declined 8,300, or 5%, in 1982. There were 146,900 people employed in the meat packing industry in 1982, of whom 120,600 were production workers.

Industry wage rates for production workers rose slightly in 1982 to $9.00 per hour. Average weekly earnings were reported at $371.70. Employment and wage data are shown in Table A-7.

Unlike meat packing, the long-term trend in meat processing has been towards increasing employment levels. The trend continued in 1982 as the number of people employed in meat processing rose almost 2%, to 71,200. Production workers numbered 52,700, unchanged from 1981.

Wage rates in the meat processing industry historically have been below those of meat packing. In 1982, however, average hourly earnings of workers in meat processing plants exceeded earnings of workers in meat packing plants. Wage rates for meat processing workers increased 4% in 1982 to $9.08 per hour.

Average wage rates for both meat packing workers and meat processing workers remain above the average paid for manufacturing as a whole.

TABLE 1-7

Employment and Earnings, 1981-82

Item	Unit	1981	1982
Meat Packing			
Total Employees	Thous.	155.2	146.9
Production Workers	Thous.	127.4	120.6
Avg. Weekly Earnings	Dollars	$371.36	$371.70
Avg. Weekly Hours	Hours	41.4	41.3
Avg. Hourly Earnings	Dollars	$8.97	$9.00
Meat Processing			
Total Employees	Thous.	70.9	71.2
Production Workers	Thous.	52.7	52.7
Avg. Weekly Earnings	Dollars	$345.71	$357.75
Avg. Weekly Hours	Hours	39.6	39.4
Avg. Hourly Earnings	Dollars	$8.73	$9.08
All Manufacturing			
Total Employees	Thous.	20,170.0	18,853.0
Production Workers	Thous.	14,020.0	12,790.0
Avg. Weekly Earnings	Dollars	$318.00	$330.65
Avg. Weekly Hours	Hours	39.8	39.9
Avg. Hourly Earnings	Dollars	$7.99	$8.50

Source. U.S. Department of Labor

Part II—Financial Data for Participating Companies

The 1982 AMI financial survey includes data from 95 meat packing companies and 69 meat processing companies. Participating packers accounted for 50% of the commercial cattle slaughter and 77% of the commercial hog slaughter in 1982. Sales of participating packers represented 64% of total estimated meat packing sales in 1982.

Meat packing companies are defined as those involved in the slaughter of livestock, regardless of whether they also further process meats and meat products. Meat processing firms are defined as those companies which do not slaughter livestock, but specialize in manufacturing sausage and other processed meat products. These firms procure raw materials from meat packers, either directly or through brokers.

For purposes of classification, meat packers are grouped by sales category as follows:

National Packers are those companies with annual sales exceeding $500 million. These companies' products generally are distributed nationwide. This year's survey included 13 national packers, whose sales accounted for 76% of the total sales of all participating packers.

Regional Packers are companies with annual sales of $50 million to $500 million; they generally do not distribute their products nationwide. However, many of these companies have good market coverage in their regions, where they compete strongly with national packers. This year's survey included 39 regional packers, who accounted for 22% of total sales of all participating packers.

Local Packers are defined as those with sales of less than $50 million. Firms in this category generally distribute their products in the areas immediately adjacent to their plants. This year's survey included 43 local packers, whose sales accounted for 2% of total participating packer sales.

Business Structure

Most 1982 survey participants were independently incorporated, as either privately-held or public companies. Although 73 independently-incorporated meat packers reported 82,655 stockholders in 1982, a relatively small number of these companies accounted for the majority of the stockholders. Similarly, a minority of the 59 independently-incorporated meat processors accounted for the majority of the processing participants' 17,682 stockholders. Only eight firms in the 1982 survey are publicly-held with stocks traded on national exchanges; only 13 of the participants reported 100 or more stockholders. Most participating packing and processing firms are family-owned or closely-held concerns with few stockholders.

The 1982 survey included 29 meat packing or processing subsidiaries of conglomerate corporations, and three cooperatives.

TABLE 2-1

Business Structure of Participants, 1982

Type of Structure	No. of Companies	
	Meat Packers	Meat Processors
Cooperatives	3	0
Subsidiaries	19	10
Independently Incorporated	73	59
Total Companies	95	69
Number of Stockholders	82,655	17,682

Earnings Ratios

Earnings ratios improved for participating national packers but declined for participating regional and local packers.

Average income-to-sales for all packer participants rose from .65% in 1981 to .85% in 1982; average income-to-assets rose from 3.88% to 5.12%; and average income-to-net worth rose from 7.84% to 10.06%. The largest group of participants in the survey had income-to-sales ratios between 0 and 1%, putting them in the low percentage bracket. Interestingly, when income-to-net worth is analyzed, a large number of companies exhibited ratios between 5 and 15%, placing them in the medium ratio bracket, while a significant number had high income-to-net worth ratios exceeding 15%.

Nearly 20% of the survey's packer participants—16—reported a net income loss in 1982.

Average income ratios for participating meat processors declined in 1982. Average income-to-sales for processors fell from 2.02% in 1981 to 1.91% in 1982. Nine meat processors reported negative earnings in 1982.

Sales Dollar by Company Classification

Analysis of the sales dollar by company classification shows a significant difference in earnings-to-sales ratios between meat packers and meat processors. Participating processors earned 1.9¢ after taxes on each dollar of sales, while participating packers earned only 0.8¢. Regional packers reported the lowest return on sales. After-tax earnings percentages were the same for both national and regional packers.

Livestock and raw material costs accounted for a smaller proportion of the sales dollar for national packers than for regional and local packers. National packers' operating expenses accounted for a greater proportion of their sales dollar. Some national packers are involved in further processing of branded products; in common with meat processing companies, these companies show somewhat wider gross operating margins. The wider operating margins reflect a different labor and operating cost structure, as well as the value-added nature of meat processing.

TABLE 2-2

Earnings Ratios, 1981-82

Company Classifications	Earnings to Sales		Earnings to Assets		Earnings to Net Worth	
	1981	1982	1981	1982	1981	1982
Meat Packing			Percent			
13 National Packers	.60%	.90%	3.50%	5.16%	7.07%	10.13%
38 Regional Packers	.79	.68	5.34	4.93	11.22	9.80
43 Local Packers	1.00	.90	5.82	5.35	9.79	9.30
94 Company Average	.65	.85	3.88	5.12	7.84	10.06
Percentage Brackets*			Number of Companies			
High Ratios	14	18	18	19	35	28
Medium Ratios	25	13	28	26	29	37
Low Ratios	35	47	27	32	11	11
Loss	15	16	15	6	13	17
Total Packers	89	94	88	93	88	93
Meat Processing			Percent			
69 Meat Processing Co's	2.02%	1.91%	7.62%	7.11%	12.77%	12.05%
Percentage Brackets*			Number of Companies			
High Ratios	26	29	26	20	27	27
Medium Ratios	20	14	17	20	30	27
Low Ratios	15	17	18	20	5	6
Loss	8	9	8	9	7	9
Total Processors	69	69	69	69	69	69

*Percentage Brackets are defined as follows:
Earnings-to-Sales: High, over 2%; Medium, 1 to 2%; Low, 0 to 1%
Earnings-to-Assets: High, over 10%; Medium, 5 to 10%; Low, 0 to 5%
Earnings-to-Net Worth: High, over 15%; Medium, 5 to 15%; Low, 0 to 5%

TABLE 2-3

Percentage Breakdown of the Sales Dollar by Company Classifications, 1982

Item	Meat Packing Companies				Meat Processing Companies
	National	Regional	Local	Total	
Total Sales	100.0%	100.0%	100.0%	100.0%	100.0%
Cost of Livestock and Raw Materials	78.0	79.7	79.6	78.4	68.2
Gross Margin	22.2	20.3	20.4	21.6	31.8
Operating Expenses					
Wages and Salaries	7.5	7.7	8.3	7.5	9.1
Employee Benefits					
Retirement Expense	.4	.3	.2	.4	.6
Social Security Taxes	.6	.6	.6	.6	.7
Insurance & Hospitalization	.8	.8	.5	.8	.8
Vacation, Holiday, & Sick Leave	.6	.5	.3	.6	.6
All Other	.2	.1	.1	.1	.2
Total Benefits	2.5	2.2	1.8	2.5	2.8
Interest	.4	.3	.5	.4	.4
Depreciation	.6	.7	.9	.6	1.1
Rents	.3	.3	.2	.3	.5
Taxes*	.1	.1	.2	.1	.6
Supplies & Containers	3.6	2.8	2.4	3.4	5.1
All Other Expenses	5.5	5.0	4.5	5.3	9.2
Total Operating Expenses	20.4	19.0	18.8	20.1	28.7
Income Before Taxes	1.6	1.3	1.5	1.5	3.1
Income Taxes	.7	.6	.6	.7	1.2
Net Income	.9	.7	.9	.8	1.9

*Other than Social Security and Income Taxes. Totals may not add due to rounding.

Wage, salary, and benefit costs accounted for 11.9% of meat processors' sales, 10.0% of national packers' sales, 9.9% of regional packers' sales, and 10.1% of local packers' sales.

Sales by Product Category

Fresh meat accounted for almost 74% of the sales of participating packers. National packers reported the largest share of fresh meat sales; these figures are significantly higher than sales by regional packers and local packers. Processed meat sales represented more than 21% of participating packers' sales. Processed meat was a significant component of sales for regional and local packers—about 35% and 33% respectively—and less for national packers. Non-meat items—including such products as poultry, cheese, pickles, and miscellaneous deli items—accounted for about 6% of total sales by national packers. Of the 13 national

TABLE 2-4

Breakdown of Sales Dollar by Product Category, 1982

	Meat Packing Companies			
	National	Regional	Local	Total
No. of Companies	13	39	43	95
		Percent of Sales		
Product Category				
Fresh Meat	76.7%	63.9%	64.2%	73.6%
Processed Meat	17.6	34.5	33.0	21.6
Non-Meat Items	5.7	1.6	2.8	4.8
	100.0	100.0	100.0	100.0

packers, 8 reported sales in this product category; most reported non-meat sales amounting to between 2% and 3% of total sales. However, one national packer reported non-meat sales that accounted for almost 32% of total sales, influencing the aggregate figure.

Sales Dollar by Species

Pre-tax income for participating cattle and hog packers improced in 1982, but higher tax costs resulted in cattle packers' net income being virtually unchanged from the year earlier. The net income-to-sales ratio for hog packers increased to 1.0 from the depressed 1981 figure.

Return on net worth was 12.0% for cattle packers and 9.4% for hog packers—above the average 9.1% return on net worth for all manufacturers in 1982.

The gross operating margin is typically wider for hog packers than for beef packers, about 32% in 1982 for the former, versus 11% for the latter. This reflects the fact that pork products entail more processing and involve a greater value-added component. Reduced hog supplies in 1982 resulted in unused plant capacity; along with sluggish demand conditions, these reduced supplies adversely affected pork packing operations.

TABLE 2-5a

Breakdown of Meat Packers' Sales Dollar by Species Slaughtered 1981-82

Item	Cattle Packers[1]		Hog Packers[1]	
	1981	1982	1981	1982
Total Sales	100.0%	100.0%	100.0%	100.0%
Cost of Livestock	89.4	88.9	67.6	68.2
Gross Margin	10.6	11.1	32.4	31.8
Operating Expenses				
Wages and Salaries	4.3	4.7	11.6	10.9
Employee Benefits				
Retirement Expense	.1	.1	.8	.7
Social Security Taxes	.3	.3	.8	.8
Insurance & Hospitalization	.3	.3	1.3	1.3
Vacation, Holiday, & Sick Leave	.2	.2	1.0	.9
All Other	Sm.	Sm.	.2	.1
Total	.9	.9	4.1	3.8
Interest	.2	.2	.5	.5
Depreciation	.4	.4	1.0	1.0
Rents	.1	.2	.3	.3
Taxes	.1	.1	.2	.2
Supplies & Containers	1.5	1.7	5.6	5.2
All Other	2.0	1.5	8.0	8.1
Total Operating Expenses	9.5	9.7	31.3	30.0
Income Before Taxes	1.1	1.4	1.1	1.8
Income Taxes	.4	.7	.6	.8
Net Income	.7	.7	.5	1.0

[1] *Refers to AMI Annual Financial Survey participants whose slaughter of identified species represented at least 75% of their total liveweight slaughter.*

TABLE 2-5b

Financial Ratios for Meat Packers Compared with All Manufacturers, 1982

Industry Segment	Earnings as Percent of			Sales to Assets Ratio
	Sales	Assets	Net Worth	
Meat Packing Industry	.8	5.3	10.4	6.5
36 Beef Packers	.7	6.5	12.0	9.2
35 Pork Packers	1.0	4.6	9.4	4.5
Total Manufacturing	3.5	4.4	9.1	1.3

Source: American Meat Institute and U.S. Department of Commerce

Working Capital

Average year-end working capital position remained unchanged in 1982 for participating packers and declined only slightly for participating processors. The ratio of current assets to current liabilities averaged 1.98 for packers, with only regional packers reporting an increase, and 1.93 for processors. Individual ratios for both packers and processors varied widely, but a significant number of participants in both categories reported current assets-to-current liabilities ratios greater than 3.

Breakdown of Current Assets

Current assets represented 53% of the assets of participating packers and processors. The composition of current assets differed between the groups, however—almost half of the processors' current assets consisted of inventories; the greatest part of packers' current assets were represented by receivables.

Among packer classifications, current assets' share of total assets was smallest for national packers and largest for regional packers. A breakdown of packers' year-end current assets shows national packers reported the largest inventory as a percentage of current assets Local packers reported the highest level of receivables relative to current assets. Local packers reported the largest "other" share of current assets, including items such as cash, short-term investments, and pre-paid expenses.

TABLE 2-6

Ratio of Current Assets to Current Liabilities, 1981-82

Company Classifications	1981	1982
Meat Packing	**Ratios**	
13 National Packers	2.06	2.05
38 Regional Packers	1.67	1.72
43 Local Packers	2.88	2.69
94 Company Average	1.98	1.98
Ratio Groups	**No. of Companies**	
Less than 2	39	41
2 to 3	15	20
3 to 4	12	9
4 to 5	7	7
Over 5	15	17
Total Packers	88	94
Meat Processing	**Ratios**	
69 Meat Processing Co's	1.94	1.93
Ratio Groups	**No. of Companies**	
Less than 2	32	35
2 to 3	17	11
3 to 4	8	9
4 to 5	4	3
Over 5	8	11
Total Processors	69	69

TABLE 2-7

Percentage Breakdown of Current Assets, 1982

Item	Meat Packing Companies				Meat Processing Companies
	National	Regional	Local	Total	
No. of Companies	13	38	42	93	69
Inventory	38.8%	36.0%	32.2%	38.1%	48.0%
Receivables	44.5	49.7	41.6	45.4	35.4
Other	16.7	14.3	26.2	16.5	16.6
Total Current Assets	100.0	100.0	100.0	100.0	100.0
Current Assets as % of Total Assets	51.7	60.4	54.5	53.2	53.0

Sales Turnover

Participants' sales-to-assets ratios increased in 1982 for regional and local packers, but declined for national packers. The ratio measures the degree of sales turnover within an industry; the fact that the ratio is much higher for meat packers than for other manufacturing underscores the high-volume nature of meat packing.

TABLE 2-8

Ratio of Sales to Total Assets 1981-82

Company Classifications	1981	1982
Meat Packing	**Sales Ratios**	
13 National Packers	5.86	5.73
38 Regional Packers	7.03	7.40
43 Local Packers	5.82	5.96
94 Company Average	6.06	6.03
Ratio Groups	**No. of Companies**	
Less than 4	11	9
4 to 5	7	9
5 to 6	19	16
6 to 7	12	13
7 to 8	8	13
8 to 9	7	8
Over 9	24	26
Total Packers	88	94
Meat Processing	**Sales Ratios**	
69 Meat Processing Co's	3.78	3.73
Ratio Groups	**No. of Companies**	
Less than 4	26	32
4 to 5	19	11
5 to 6	9	11
6 to 7	7	7
7 to 8	2	2
8 to 9	1	1
Over 9	5	5
Total Processors	69	69

Inventory Ratio

The ratio of cost of goods sold to inventories increased for all packer classifications in 1982. Meat processors also reported an increased inventory ratio, but it was less than half that of meat packers. Participants' cost of livestock and raw materials was used as a proxy for the cost of goods sold in developing the inventory ratio.

TABLE 2-9

Ratio of Cost of Goods Sold[1] to Inventories 1981-82

Company Classifications	1981	1982
Meat Packing		
13 National Packers	21.45	22.40
37 Regional Packers	26.38	27.84
42 Local Packers	25.09	27.23
92 Company Average	22.36	23.49
Meat Processing		
69 Meat Processing Co's	9.77	10.04

[1]*Cost of livestock and raw materials used as proxy for cost of goods sold*

Source and Disposition of Income

The percent of total packer income derived from meat operations has been lower for the past two years than traditionally expected. Companies participating in the 1982 survey reported only 65% of income derived from meat operations. The national packer percentage—76%—was higher; the same category was lower for regional (33%) and local (38%) packers. These figures reflect differences in magnitude of total income between packer classifications, and the fact that smaller packers sometimes are diversified into non-meat areas.

Non-operating income is a significant element in overall income for the industry. National packers reported that non-operating income accounted for 24% of total income. Among all participants in the survey, non-operating sources accounted for 35% of total income.

Earnings retained amounted to approximately 80% for all packers. National packers paid out a higher percentage of income in dividends than regional and local packers.

Meat processors reported a larger percentage of income (approximately 78%) from operating sources during 1982. Processors paid out a smaller share of their income in dividends and retained a higher share of income than did meat packers.

TABLE 2-10

Percentage Breakdown of Source and Disposition of Income, 1982

Company Classifications	Income			Disposition of Income		
	Operating	Other	Total	Non-Operating Charges	Dividends Paid	Earnings Retained
Meat Packing†						
5 National Packers	76.1%	23.9%	100.0%	*%	19.3%	80.3%
27 Regional Packers	33.0	67.0	100.0	6.9	15.2	77.9
40 Local Packers	37.7	62.3	100.0	1.8	17.1	81.1
72 Company Average	65.4	34.6	100.0	1.5	18.4	80.2
Meat Processing†						
59 Meat Processing Co's	77.8	22.2	100.0	2.3	13.1	84.6

*Less than .05%
†Does not include subsidiaries or cooperatives

Owner Equity

Net worth as a percentage of total assets increased in 1982 for national and regional packers and declined for local packers. The ratio, which provides a measure of stockholder equity, was 50.9% for all participants. A significant number of the companies participating had a ratio of less than 40%.

TABLE 2-11

Net Worth as Percent of Total Assets, 1981-82

Company Classifications	1981	1982
Meat Packing	**Percent**	
13 National Packers	49.6%	50.9%
38 Regional Packers	47.6	49.8
43 Local Packers	59.5	57.6
94 Company Average	49.4	50.9
Percentage Groups	**No. of Companies**	
Less than 40%	31	35
40 to 50%	10	9
50 to 60%	14	17
60 to 70%	11	7
70 to 80%	8	8
80 to 90%	8	12
Over 90%	6	6
Total Packers	**88**	**94**
Meat Processing	**Per cent**	
69 Meat Processing Co's	59.7%	59.0%
Percentage Groups	**No. of Companies**	
Less than 40%	17	16
40 to 50%	9	12
50 to 60%	16	12
60 to 70%	8	9
70 to 80%	10	10
80 to 90%	8	8
Over 90%	1	2
Total Processors	**69**	**69**

Selling and Administrative Expenses

Selling and administrative expenses accounted for 18% of meat packers' operating expenses and 26% of meat processors' operating expenses in 1982.

As a percentage of total operating expenses, selling and administrative expenses declined in 1982 for both participating meat packers and processors.

TABLE 2-12

Total Selling and Administrative Expenses as Percent of Total Operating Expenses, 1981-82

Company Classifications	Percent	
	1981	1982
Meat Packing		
13 National Packers	18.9%	18.0%
37 Regional Packers	18.2	18.7
34 Local Packers	26.2	29.3
84 Company Average	18.9	18.4
Meat Processing		
66 Meat Processing Co's	26.0	25.9

Advertising

Advertising costs accounted for an average 4.3% of meat packers' total operating expenses in 1982, up from 3.6% in 1981. National packers reported the largest increase in advertising expenditures relative to total operating expenses, but the advertising percentage increased for all classifications of meat packers during the year. The advertising percentage for meat processors also increased in 1982 from 8.0% to 8.5%.

TABLE 2-13

Total Advertising Expenses as Percent of Total Operating Expenses, 1981-82

Company Classifications	Percent 1981	Percent 1982
Meat Packing		
13 National Packers	3.8%	4.6%
37 Regional Packers	3.0	3.3
34 Local Packers	1.6	2.2
84 Company Average	3.6	4.3
Meat Processing		
66 Meat Processing Co's	8.0	8.5

Capital Expenditures

Capital expenditures declined in 1982 for participating packers and processors. The decline in packer capital expenditures resulted solely from lower expenditures reported by national packers; capital expenditures actually increased for regional and local packers.

The 1982 financial survey requested information on participants' current, non-current and total assets. Assuming that participants' non-current assets were predominately fixed, the degree to which participants replaced their fixed assets in 1982 can be approximated by the ratio of capital expenditures to non-current assets. This ratio averaged .14 for national packers in 1982, .19 for regional packers, .16 for local packers and .13 for meat processors.

TABLE 2-14

Capital Expenditures, 1981-82

Company Classifications	Companies Reporting	Million Dollars
Meat Packing	**1982**	
National Packers	13	$282.4
Regional Packers	37	78.1
Local Packers	30	7.6
Total Packers	**80**	**368.1**
	1981	
National Packers	13	$347.2
Regional Packers	33	58.5
Local Packers	28	6.7
Total Packers	**74**	**412.4**
Meat Processing	**1982**	
Total Processors	**65**	**$53.8**
	1981	
Total Processors	**64**	**$63.7**

Repairs

Repair costs accounted for 4.6% of packer operating expenses in 1982 and for 3.3% of processor operating expenses. Comparisons of the percentages for packers and processors are not strictly valid, however, because of differences in the two groups' operating structures and capital requirements.

TABLE 2-15

Total Repairs Expense as Percent of Total Operating Expenses, 1981-82

Company Classifications	Percent 1981	Percent 1982
Meat Packing		
13 National Packers	4.6%	4.6%
39 Regional Packers	4.3	4.5
42 Local Packers	4.0	3.9
94 Company Average	4.5	4.6
Meat Processing		
68 Meat Processing Co's	3.6	3.3

Another useful measure provided by repair expense is the rate of repairs relative to total capital equipment. This is approximated by the ratio of repair expense to fixed assets.

Assuming participants' non-current assets were predominately fixed assets (i.e., plant and capital equipment), the ratios of repair expense to fixed assets were as follows in 1982: .11 for national packers, .16 for regional packers, .10 for local packers and .08 for meat processors.

Part III—Characteristics of the Industry

Meat packing and processing comprise the largest segment of the United States food manufacturing industry. Based on the AMI survey, the meat packing industry had 1982 sales of $49.5 billion. Due to data limitations, it is not possible to obtain strictly comparable sales data for the meat processing industry. However, an estimate may be derived from 1977 census data, which showed the value of shipments by the meat industry equal to 27% of the value shipped by the meat packing industry. This suggests sales of the meat processing industry were close to $13.4 billion, and sales of the entire meat packing and processing industry totaled $62.9 billion in 1982. By way of contrast, total sales of food manufacturers (including alcohol) were reported at $283.6 billion in 1982.

Number of Plants

At the end of 1982 there were 350 federally inspected plants specializing in the slaughter of livestock, up from 320 plants a year earlier (Table 3-1). In addition, there were 1,399 plants involved in livestock slaughter and further meat processing, and 4,850 federally inspected plants involved in meat processing but not slaughter.

Of federally inspected slaughtering plants, 1,506 slaughtered cattle in 1982, 836 slaughtered calves, 1,344 slaughtered hogs, and 986 slaughtered sheep and lambs.

A large number of small custom operations and meat locker plants do not come under federal inspection, but are subject to state inspection. According to government estimates, there were 4,037 livestock slaughtering establishments not covered by federal inspection at the end of 1982, down from 4,048 a year earlier.

TABLE 3-1

Number of Federally Inspected Livestock Slaughter and Meat Processing Plants, 1981 and 1982

Item	1981	1982
Number of Plants at end of Year*		
Slaughter only	320	350
Slaughter and Process	1,448	1,399
Process only	4,855	4,850
Plants Slaughtering During Year		
Cattle	1,555	1,506
Calves	821	836
Hogs	1,388	1,344
Sheep & Lambs	990	986

Source: USDA, FSIS and ESS.

**Includes plants in American Samoa, Guam, Puerto Rico, Virgin Islands, and Mariana Islands.*

Type of Slaughter

The meat and poultry inspection program of the U.S. Department of Agriculture is established by law to apply uniform standards for meat inspection and to assure safe, wholesome, and accurately labeled products. Only federally inspected plants may sell their products across state lines or export to other nations.

In recent years, federally inspected plants have accounted for an increasing share of total commercial slaughter. In 1982, 95% of the cattle, 90% of the calves, and 97% of the hogs and sheep and lambs were slaughtered in federally inspected plants (Table 3-2).

TABLE 3-2

Federally Inspected Slaughter as Percent of Total Commercial Slaughter

Year	Cattle	Calves	Hogs	Sheep & Lambs
1910	61.2	38.5	77.9	77.1
1920	68.8	53.7	84.9	81.4
1930	70.6	64.9	82.4	80.9
1940	67.7	64.1	79.4	82.6
1950	73.2	58.7	81.9	91.3
1960	76.9	64.0	83.7	88.3
1970	87.9	74.3	91.1	94.9
1980	93.6	88.6	95.6	96.1
1981	93.9	88.6	95.9	96.4
1982	94.6	90.4	96.5	97.3

Source: USDA, SRS

Size of Plants

Food processing, like agriculture in general, has become more specialized, and large operations which can take advantage of economies of size now dominate production. Meat packing is no exception. A relatively small number of federally inspected plants account for most of the livestock slaughtered.

In 1982, cattle slaughterers with a plant capacity of more than 50,000 head per year, or approximately 1,000 head per week, numbered only 134 plants (Table 3-3). Although these plants represented only 9% of all federally inspected slaughtering plants, they slaughtered 80% of all cattle slaughtered commercially in the United States. Likewise, 101 hog plants, or 8% of the toal, reported slaughtering more than 100,000 head per year, or approximately 2,000 head per week. These 101 plants accounted for 91% of the nationwide commercial hog slaughter in 1982.

The number of calf slaughter plants reporting 10,000 head or more annual slaughter was 55, representing 7% of the plants and 82% of the slaughter. The number of sheep and lamb plants reporting 10,000 head or more annual slaughter was 27, representing 3% of the plants and 93% of the slaughter.

TABLE 3-3

Number of Large Plants and Percent of Commercial Slaughter

Species and Plant Capacity	Number of Plants	Percent of F.I. Plants	Percent of Commercial Slaughter
Cattle—50,000 or more			
1975	211	14%	73%
1976	217	13	76
1977	211	14	77
1978	191	13	78
1979	153	10	78
1980	149	11	80
1981	129	8	79
1982	134	9	80
Calves—5,000 or more			
1975	88	11	71
1976	98	11	79
1977	105	11	81
1978	85	10	82
1979	70	9	85
1980	66	9	84
—10,000 or more			
1981	49	6	78
1982	55	7	82
Hogs—100,000 or more			
1975	118	10	90
1976	116	9	85
1977	117	10	90
1978	109	9	91
1979	114	9	92
1980	115	9	92
1981	110	8	91
1982	101	8	91
Sheep & Lambs—1,000 or more			
1975	72	9	96
1976	80	9	96
1977	70	8	96
1978	65	7	95
—10,000 or more			
1979	26	3	94
1980	24	3	94
1981	27	3	93
1982	27	3	93

Source: USDA, SRS

Method of Livestock Procurement

Most livestock procured for slaughter in the United States are purchased on a liveweight basis. During the past decade there has been some increase in the percentage of livestock purchased on a carcass grade and weight basis (Table 3-4).

Most recent government data show that packers purchased 28% of the cattle, 17% of the calves, 13% of the hogs and 19% of the sheep and lambs on a carcass basis. For each classification except sheep, the 10 largest packers purchased a larger percentage on a carcass basis.

Three states—Nebraska, Iowa and Colorado—accounted for two-thirds of all grade and weight purchases of steers and heifers. Four states—Texas, Nebraska, Iowa and Minnesota—accounted for one-half of cows and bulls purchased on a carcass basis. Iowa, the leading hog state, accounted for one-third of the hogs purchased on a carcass basis.

TABLE 3-4

Livestock Purchased on a Grade and Weight Basis as Percent of Total Purchases, 1971-81

Year	Cattle	Calves	Hogs	Sheep & Lambs
Ten Largest Packers*				
1971	24%	6%	7%	11%
1972	27	6	9	13
1973	31	4	9	10
1974	30	12	11	11
1975	32	29	15	11
1976	30	24	17	11
1977	24	22	14	9
1978	29	24	16	3
1979	29	34	17	12
1980	35	89	17	10
1981	30	97	20	4
All Packers				
1971	21	6	5	7
1972	23	7	5	8
1973	23	6	6	8
1974	23	6	7	9
1975	24	9	9	11
1976	23	8	11	10
1977	23	9	9	9
1978	26	11	10	10
1979	27	18	12	25
1980	29	20	11	28
1981	28	17	13	19

Source: USDA, P&SA

**Based upon total dressed weight of all livestock slaughtered*

Source of Livestock Procurement

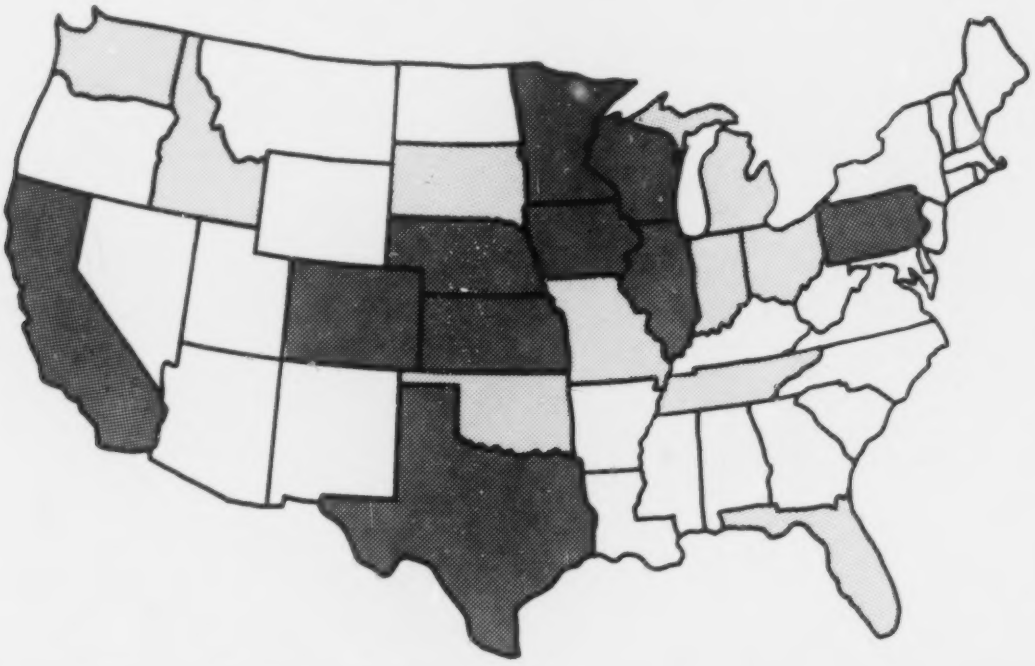
Most packers obtain livestock from producers directly or via country buying stations. Most recent data show that 77% of cattle, 79% of hogs, and 78% of sheep and lambs were procured directly. Auction markets remained a major source of calves, accounting for 49% of packer purchases. Auction markets also remain the major source of cow and bull procurement, accounting for 52% of purchases. By contrast, 87% of steers and heifers were procured either directly from feedlots or farms via country dealers.

Location of Slaughter Plants

The geographic distribution of slaughter plants tends to match roughly the density of livestock production. Hog production and slaughter is concentrated in the corn-producing states, while cattle slaughter is concentrated in the major cattle-feeding states. California, Colorado, and Texas dominate lamb production and slaughter, while calf slaughter is concentrated in the dairy producing states of New York, Wisconsin, and Pennsylvania.

The tables and charts on the following pages provide detailed procurement data for each livestock species in the major slaughter states.

Cattle Slaughter and Procurement, 1982



State	Commercial Slaughter		Procurement Source*			Grade & Weight Purchases as % of Total Purchases*
	Ths. Head	Percent of Total	Direct	Terminal Market	Auction Market	
Texas	5,702	15.9%	89.6%	.5%	10.0%	12.4%
Nebraska	5,659	15.8	82.2	10.8	7.2	45.2
Kansas	4,290	12.0	99.2	.4	.4	7.2
Iowa	3,232	9.0	89.0	6.8	4.1	54.7
Colorado	1,909	5.3	97.1	—	2.9	41.3
California	1,889	5.3	77.4	.1	22.6	5.3
Wisconsin	1,160	3.2	20.2	33.4	46.4	22.8
Minnesota	1,038	2.9	74.3	19.3	6.4	53.4
Illinois	944	2.6	61.0	20.8	18.2	11.6
Pennsylvania	858	2.4	12.8	40.4	46.8	7.9
Total Above	**26,680**	**74.4**	**82.4**	**7.4**	**10.2**	**28.1**
Washington	849	2.4	91.2	—	8.8	46.8
Idaho	812	2.3	78.2	—	21.8	31.7
Missouri	773	2.2	62.7	23.7	13.6	58.0
Ohio	658	1.8	58.3	4.0	37.8	24.0
South Dakota	598	1.7	46.7	24.5	28.7	27.0
Oklahoma	558	1.6	76.8	7.5	15.7	8.0
Michigan	555	1.5	11.2	10.7	78.1	2.9
Florida	380	1.1	58.5	—	41.5	40.5
Indiana	341	.9	31.3	50.7	18.0	8.3
Tennessee	325	.9	39.5	6.5	54.0	13.0
Total Above	**32,527**	**90.7**	**79.0**	**8.0**	**13.0**	**28.6**
United States	35,843	100.0	76.8	8.1	15.1	27.8

Source: USDA, SRS and P&SA

**Based on 1981 data*

—Less than 0.5%

Totals may not add because of rounding

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Calf Slaughter and Procurement, 1982

State	Commercial Slaughter		Procurement Source*			Grade & Weight
	Ths. Head	Percent of Total	Direct	Terminal Market	Auction Market	Purchases as % of Total Purchases*
New York	674	22.3%	34.8%	14.1%	51.0%	23.5%
Wisconsin	418	13.8	57.1	11.7	31.2	21.7
Pennsylvania	306	10.1	16.4	2.8	80.8	7.9
Texas	235	7.8	46.4	2.7	50.9	10.0
California	231	7.7	30.5	—	69.5	9.3
New England †	185	6.1	43.3	9.8	47.0	2.4
Illinois	184	6.1	46.2	19.9	33.9	—
Louisiana	109	3.6	12.8	—	87.2	—
Florida	107	3.6	36.8	—	63.2	11.6
New Jersey	96	3.2	55.8	—	44.2	13.6
Total Above	**2,544**	**84.2**	**39.5**	**9.3**	**51.2**	**14.3**
Indiana	91	3.0	100.0	—	—	100.0
Michigan	74	2.4	9.3	7.4	83.3	—
Washington	44	1.5	75.0	—	25.0	57.1
South Carolina	41	1.4	74.4	—	25.6	30.8
Delaware/Maryland	36	1.2	86.7	—	13.3	53.3
Tennessee	36	1.2	N.A.	N.A.	N.A.	—
Mississippi	31	1.0	100.0	—	—	—
Georgia	27	.9	100.0	—	—	100.0
Ohio	25	.8	57.1	—	42.9	—
Virginia	18	.6	38.1	—	61.9	—
Total Above	**2,930**	**97.0**	**41.8**	**8.6**	**49.6**	**17.0**
United States	3,021	100.0	41.9	9.0	49.2	17.0

Source: USDA, SRS and P&SA

**Based on 1981 data*

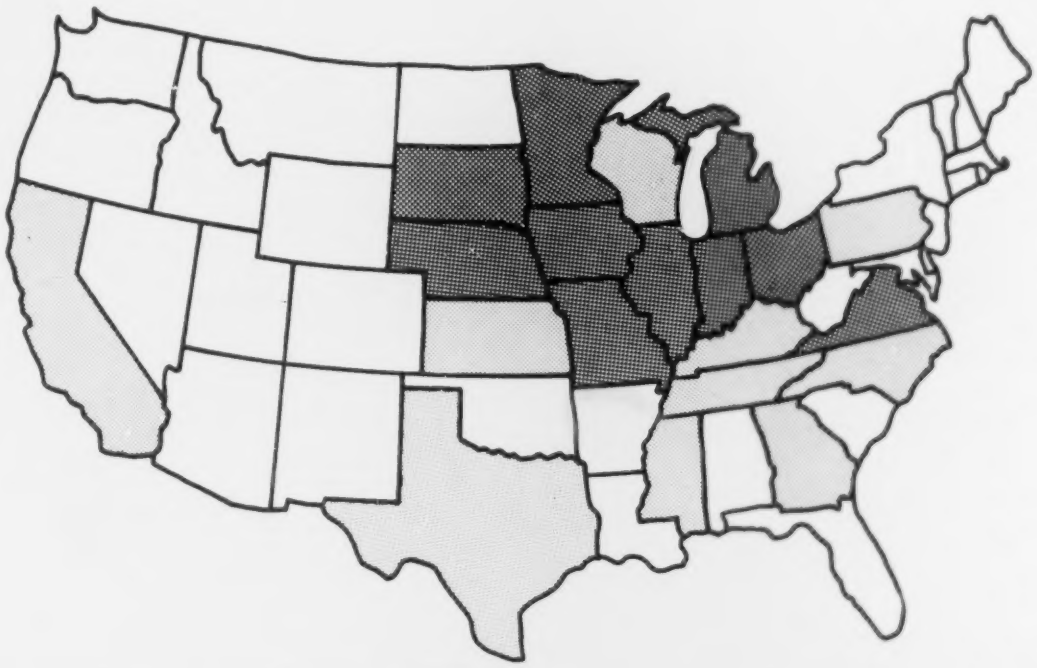
—Less than 0.5%

† Includes CT, ME, MA, NH, RI, VT

N.A.—Not Available

Totals may not add because of rounding

Hog Slaughter and Procurement, 1982



State	Commercial Slaughter		Procurement Source*			Grade & Weight
	Ths. Head	Percent of Total	Direct	Terminal Market	Auction Market	Purchases as % of Total Purchases*
Iowa	18,663	22.7%	84.7%	11.3%	4.0%	14.7%
Illinois	7,006	8.5	80.2	17.8	2.0	14.1
Minnesota	5,537	6.7	85.7	13.7	.6	33.8
Michigan	5,219	6.4	47.7	13.0	39.4	—
Nebraska	4,335	5.3	90.4	1.4	8.2	40.5
Ohio	4,199	5.1	64.1	16.2	19.7	5.8
Missouri	4,126	5.0	87.8	9.0	3.2	11.2
Virginia	3,520	4.3	93.0	.6	6.4	—
South Dakota	2,909	3.5	81.6	14.9	3.5	20.2
Indiana	2,813	3.4	81.7	18.1	.3	8.7
Total Above	**58,328**	**71.0**	**80.5**	**11.8**	**7.7**	**15.4**
North Carolina	2,489	3.0	95.8	.3	3.9	—
Mississippi	2,273	2.8	94.4	4.0	1.6	—
Kentucky	2,233	2.7	92.0	2.8	5.2	9.6
Tennessee	2,133	2.6	83.1	12.8	4.2	15.4
Wisconsin	2,065	2.5	83.9	6.1	10.0	—
Georgia	2,011	2.4	56.5	.7	42.8	—
Pennsylvania	1,993	2.4	59.7	10.4	29.9	3.8
California	1,818	2.2	39.9	55.6	4.5	—
Texas	1,286	1.6	51.2	12.1	36.7	5.6
Kansas	938	1.1	94.2	1.8	4.0	20.9
Total Above	**77,569**	**94.4**	**79.7**	**11.4**	**8.9**	**12.9**
United States	82,190	100.0	78.5	11.6	10.0	12.6

Source: USDA, SRS and P&SA

**Based on 1981 data*

—Less than 0.5%

Totals may not add because of rounding

Sheep & Lamb Slaughter and Procurement, 1982

State	Commercial Slaughter		Procurement Source*			Grade & Weight Purchases as % of Total Purchases*
	Ths. Head	Percent of Total	Direct	Terminal Market	Auction Market	
California	1,431	22.2%	96.2%	—%	3.8%	.3%
Colorado	1,348	20.9	100.0	—	—	58.6
Texas	904	14.0	93.8	—	6.2	4.3
Minnesota	596	9.2	47.5	22.4	30.1	2.6
South Dakota	406	6.3	76.4	23.6	—	5.7
Illinois	332	5.2	39.0	37.5	23.5	—
Michigan	315	4.9	—	8.5	91.5	—
Iowa	310	4.8	—	—	—	—
Washington	183	2.8	93.0	—	7.0	75.0
Pennsylvania	177	2.7	9.2	3.5	87.3	—
Total Above	**6,000**	**93.0**	**79.2**	**6.9**	**13.9**	**19.0**
New Mexico	118	1.8	76.1	—	23.9	—
New York	54	.8	19.6	2.2	78.3	—
Delaware/Maryland	43	.7	33.3	—	66.7	14.8
New Jersey	36	.6	42.0	—	57.1	—
Oregon	27	.4	10.0	—	90.0	100.0
Ohio	24	.4	—	—	100.0	—
Utah	24	.4	100.0	—	—	100.0
Missouri	23	.4	—	00.0	—	—
New England†	21	.3	50.0	—	50.0	—
Kentucky	11	.2	N.A.	N.A.	N.A.	—
Total Above	**6,380**	**98.9**	**77.9**	**6.9**	**15.2**	**18.9**
United States	6,449	100.0	77.8	6.9	15.2	18.9

Source: USDA, SRS and P&SA

**Based on 1981 data*

†Includes CT, ME, MA, NH, RI, VT

—Less than 0.5%

Totals may not add because of rounding

TABLE A-1

Financial Ratios for Manufacturing Industries, 1982

Industries	Earnings as % of			Sales to Assets Ratio	Net Worth as % of Total Assets
	Sales	Assets	Net Worth		
Durable Goods					
Motor Vehicles & Equipment	.64%	.93%	2.08%	1.46	44.70%
Aircraft, Missiles & Parts	3.24	3.56	11.36	1.10	31.39
Other Transportation Equipment	2.15	2.01	7.56	.94	26.64
Electrical & Electronic Equipment	4.35	5.39	11.18	1.24	48.23
Machinery, Except Electrical	4.34	4.36	8.49	1.00	51.41
Fabricated Metal Products	2.34	3.48	7.07	1.49	49.16
Iron and Steel	(5.46)	(5.94)	(15.90)	1.09	37.32
Nonferrrous Metals	(1.02)	(.99)	(2.20)	.96	44.89
Stone, Clay & Glass Products	1.34	1.53	3.06	1.15	50.12
Instruments & Related Products	7.84	8.74	13.70	1.11	63.77
Other Durable Manufacturing	1.69	2.47	5.30	1.45	46.48
Total Durable Goods	2.39	2.83	6.08	1.19	46.57
Nondurable Goods					
Food & Kindred Products	3.10	5.84	12.22	1.88	47.77
Tobacco Manufacturers	11.84	8.63	17.97	.73	48.05
Textile Mill Products	1.96	3.59	6.53	1.83	54.91
Paper & Allied Products	2.42	2.76	5.47	1.14	50.47
Printing and Publishing	4.56	6.27	13.15	1.38	47.71
Drugs	13.06	11.38	19.17	.87	59.33
Industrial Chemicals & Synthetics	3.29	3.14	6.75	.96	46.57
Other Chemicals & Allied Products	5.53	6.74	11.51	1.22	5?.53
Petroleum & Coal Products	5.64	6.65	13.08	1.18	50.85
Rubber & Misc. Plastic Products	2.54	3.83	7.96	1.52	48.54
Other Nondurable Manufacturing	2.35	4.64	9.63	1.97	48.15
Total Durable Goods	4.40	5.85	11.63	1.33	50.28
Total Manufacturing	**3.49**	**4.40**	**9.08**	**1.26**	**48.50**
MEAT PACKING INDUSTRY	.82	5.28	10.36	6.47	50.98

Source: Figures for meat packing industry are AMI estimates. All other figures are calculated from reports of the Economic Surveys Division, Bureau of the Census, U.S. Dept. of Commerce

TABLE A-2

Meat Animals Processed by the Meat Packing Industry, 1925-82

Year	Slaughter (1000 Head)				Live Weight (Mil. Lbs.)					Dressed Weight (Mil. Lbs.)				
	Cattle	Calves	Sheep & Lambs	Hogs	Cattle	Sheep & Calves	Lambs	Hogs	Total	Cattle	Sheep & Calves	Lambs	Hogs[1]	Total
USDA														
1925	11.440	6.488	13.971	48.182	10.799	1.147	1.135	10.729	23.810	5.686	659	543	8.110	14.998
1930	10.004	5.630	19.318	50.657	9.433	989	1.585	11.511	23.518	5.140	566	751	8.706	15.163
1935	12.334	7.256	20.179	29.919	11.051	1.381	1.698	6.672	20.802	5.754	776	801	4.994	12.325
1940	12.552	6.815	19.915	59.255	11.609	1.310	1.711	13.520	28.150	6.308	728	806	10.086	17.928
1941	13.886	6.890	20.626	54.627	13.133	1.358	1.815	12.925	29.231	7.186	761	853	9.756	18.556
1942	15.356	7.369	23.907	61.153	14.428	1.540	2.124	14.789	32.881	7.799	860	973	11.129	20.761
AMI														
1943	14.200	6.950	25.050	69.300	13.260	1.425	2.255	17.490	34.430	7.060	795	1.020	13.165	22.040
1944	16.600	9.950	24.200	83.000	15.160	2.140	2.150	19.395	38.845	7.860	1.180	975	14.605	24.620
1945	17.650	10.150	23.100	48.850	16.280	2.215	2.155	12.430	33.080	8.510	1.215	980	9.390	20.095
1946	14.900	8.700	21.750	49.950	13.815	1.810	2.050	12.725	30.400	7.250	1.000	930	9.550	18.730
1947	18.300	10.200	17.250	51.700	16.645	2.140	1.610	13.100	33.495	8.710	1.175	745	9.905	20.535
1948	15.850	9.450	16.200	51.650	14.585	1.945	1.520	12.860	30.910	7.600	1.070	695	9.735	19.100
1949	15.600	8.450	13.400	55.800	14.890	1.760	1.255	13.790	31.695	8.020	970	590	10.490	20.070
1950	15.250	7.750	12.550	60.950	14.730	1.615	1.200	14.760	32.305	7.975	895	570	11.190	20.630
1951	14.150	6.550	10.750	66.750	13.825	1.355	1.045	16.300	32.525	7.510	755	490	12.260	21.015
1952	15.050	6.400	12.850	68.950	14.670	1.395	1.250	16.560	33.785	8.035	775	590	12.480	21.880
1953	19.500	8.350	15.150	61.900	18.610	1.885	1.440	14.655	36.590	10.190	1.050	680	11.155	23.075
1954	21.650	9.250	15.350	57.050	20.350	2.065	1.460	13.745	37.620	11.085	1.140	695	10.510	23.430
1955	22.300	9.000	15.550	64.650	21.200	1.960	1.495	15.535	40.190	11.580	1.080	715	11.890	25.265
1956	23.450	9.050	15.550	73.150	22.755	2.025	1.485	17.110	43.375	12.530	1.115	710	13.005	27.360
1957	23.700	8.600	14.650	66.700	22.950	1.875	1.410	15.620	41.855	12.645	1.045	680	11.890	26.260
1958	21.300	6.700	13.550	63.800	21.110	1.405	1.330	15.035	38.880	11.770	780	645	11.495	24.690
1959	20.100	5.450	14.200	71.700	20.655	1.140	1.400	17.095	40.290	11.770	645	680	13.090	26.185
1960	22.150	5.750	15.000	73.950	22.525	1.230	1.480	17.530	42.765	12.845	695	710	13.390	27.640
1961	22.650	5.506	16.050	70.800	23.270	1.175	1.580	16.935	42.960	13.355	660	765	12.940	27.720
1962	33.000	5.450	15.700	73.360	23.405	1.140	1.530	17.655	43.730	13.390	640	740	13.530	28.300
1963	23.750	4.950	14.800	77.450	24.520	1.010	1.450	18.495	45.475	14.140	570	710	14.170	29.590
USDA														
1963	27.232	6.833	15.822	83.324	27.891	1.503	1.547	19.827	50.768	16.049	847	757	11.863	29.516
1964	30.818	7.254	14.594	83.019	31.440	1.665	1.440	20.001	54.546	18.037	928	703	12.019	31.687
1965	32.347	7.420	13.007	73.784	32.316	1.687	1.302	17.583	52.888	18.325	936	639	10.736	30.636
1966	33.727	6.647	12.737	74.011	34.085	1.563	1.303	17.906	54.857	19.493	862	639	11.130	32.124
1967	33.869	5.919	12.791	82.124	34.538	1.354	1.297	19.779	56.968	19.991	749	636	12.377	33.753
1968	35.026	5.443	11.884	85.160	35.515	1.249	1.211	20.369	58.344	20.662	696	592	12.867	34.817
1969	35.237	4.863	10.691	83.838	35.806	1.947	1.107	20.001	58.061	20.960	640	540	12.774	34.914
1970	35.025	4.072	10.552	85.817	36.260	994	1.099	20.617	58.970	21.472	558	540	13.248	35.818
1971	35.585	3.689	10.729	94.438	36.588	919	1.111	22.635	61.153	21.697	516	544	14.606	37.363
1972	35.779	3.053	10.301	84.707	37.126	767	1.081	20.249	59.223	22.218	429	533	13.460	36.640
1973	33.687	2.249	9.597	76.795	35.143	576	1.028	18.525	55.272	21.088	325	504	12.578	34.495
1974	36.811	2.987	8.847	81.762	38.247	769	928	19.974	59.918	22.844	442	454	13.583	37.323
1975	40.911	5.210	7.835	68.687	40.733	1.477	819	16.458	59.487	23.673	827	399	11.314	36.213
1976	42.655	5.350	6.714	73.784	43.442	1.428	730	17.566	63.166	25.667	813	361	12.219	39.060
1977	41.856	5.517	6.356	77.303	42.849	1.371	686	18.330	63.236	24.986	794	341	13.051	39.172
1978	39.552	4.170	5.369	77.315	40.986	1.012	601	18.555	61.154	24.010	600	300	13.209	38.119
1979	33.678	2.824	5.017	89.099	35.709	689	571	21.554	58.523	21.261	410	284	15.270	37.225
1980	33.807	2.588	5.579	96.074	36.229	633	624	23.216	60.702	21.470	379	310	16.431	38.590
1981	34.953	2.798	6.008	91.575	37.565	698	659	22.214	61.136	22.214	415	328	15.719	38.675
1982	35.843	3.021	6.449	82.190	38.128	718	715	19.932	59.493	22.366	423	356	14.121	37.266

Source: The 1925-42 figures are USDA estimates for the industry and are on a calendar-year basis.

The 1943-63 figures are AMI estimates based on the Census Bureau's definition of the meat packing industry, which covers a smaller number of plants than covered by the USDA's reports on total commercial slaughter. The figures are for fiscal years, November through October.

The 1963 figures-to-date are USDA estimates of commercial slaughter and are on a calendar-year basis.

[1] *Beginning in 1977 reported on packer-style carcass basis.*

TABLE A-3

Financial Results of the Meat Packing Industry: 1925-1982 Summary

Year	Million Dollars			Income % of		Income per 100 lbs**	
	Total Sales	Net Worth*	Net Income	Total Sales	Net Worth	Live Weight	Dressed Weight
P&S Series							
1925	$ 3,465	$ 824	$ 47	1.4%	5.7%	20¢	31¢
1930	3,628	887	32	.9	3.7	14	21
1935	2,785	697	37	1.3	5.4	18	30
1940	3,158	721	42	1.3	5.8	15	24
1941	4,066	746	65	1.6	8.7	22	35
1942	5,781	779	67	1.2	8.6	20	32
1943	6,181	783	72	1.2	9.2	21	33
1944	6,400	801	71	1.1	8.9	18	29
1945	5,739	916	51	.9	5.6	15	25
1946	6,138	944	143	2.3	15.2	46	75
1947	9,425	938	148	1.6	15.8	45	74
AMI Series (A)							
1947	9,900	1,000	152	1.5	15.2	45	74
1948	10,500	1,075	96	.9	8.9	31	50
1949	9,900	1,125	61	.6	5.4	19	30
1950	10,050	1,225	89	.9	7.3	28	43
1951	12,150	1,300	84	.7	6.5	26	40
1952	11,675	1,275	52	.5	4.1	15	24
1953	11,175	1,300	86	.8	6.6	24	37
1954	11,275	1,300	48	.4	3.7	13	20
1955	11,075	1,350	105	.9	7.8	26	42
1956	11,275	1,425	113	1.0	7.9	26	41
1957	12,025	1,450	79	.7	5.4	19	30
1958	12,925	1,500	77	.6	5.1	20	31
1959	13,275	1,600	136	1.0	8.5	34	52
1960	13,225	1,650	110	.8	6.7	26	40
1961	13,500	1,675	84	.6	5.0	20	30
1962	13,975	1,675	112	.8	6.7	26	40
1963	14,125	1,725	117	.8	6.8	26	40
AMI Series (B)							
1963	15,325	1,875	129	.9	6.9	25	44
1964	15,900	1,900	182	1.2	9.6	33	57
1965	17,125	2,050	142	.8	6.9	27	46
1966	19,500	2,050	134	.7	6.5	24	42
1967	19,825	2,175	200	1.0	9.2	35	59
1968	20,750	2,150	185	.9	8.6	32	53
1969	23,125	2,325	205	.9	8.8	35	59
1970	24,400	2,450	244	1.0	10.0	41	68
1971	24,725	2,725	334	1.4	12.3	55	89
1972	27,800	2,850	235	.8	8.2	40	64
1973	33,225	3,225	340	1.0	10.5	62	99
1974	35,500	3,375	375	1.1	11.1	63	100
1975	36,650	3,575	380	1.0	10.6	64	105
1976	37,450	3,550	349	.9	9.8	55	89
1977	37,275	3,700	275	.7	7.4	43	70
1978	43,625	4,025	333	.8	8.3	54	87
1979	47,650	3,675	488	1.0	13.3	83	131
1980	47,925	3,950	480	1.0	12.2	79	124
1981	48,525	3,700	343	.7	9.3	56	89
1982	49,500	3,900	404	.8	10.4	68	108
1925-47 Average	4,022	797	46	1.1	5.7	17	27
1947-63 Average	11,884	1,391	94	.8	6.8	25	39
1963-82 Average	31,290	2,961	288	.9	9.7	49	81
1973-82 Average	41,733	3,668	377	.9	10.3	63	100

Source: The 1925-47 P&S Series represents summary reports by the USDA compiled from financial statements of meat packing companies filed with the Packers and Stockyards Administration. These figures have not been available since 1947.

The 1947-63 figures (AMI Series (A)) are AMI estimates, based on Census of Manufacturers reports for Meat Packing, published by the Bureau of the Census.

The 1963-to-date figures (AMI Series (B)) are AMI estimates based on USDA's annual reports on commercial slaughter and meat production.

**P&S Series for net worth is an average for beginning and end of year. The two AMI Series are for year-end.*

***Figures are overstated by the amount of earnings derived from non-meat operations.*

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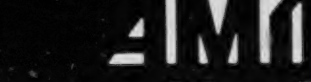

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